

Applicant : Shackleford
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In the claims:

Please modify claim 8 as indicated below:

1. (Previously Presented) A graphical user interface displaying in a first portion thereof an evolution of a solution for a genetic algorithm that represents potential solutions to complex problems as one or more chromosomes and selects a solution from the potential solutions based on the chromosome that optimally solves the complex problem according to a fitness function, said graphical user interface comprising:

an evolution parameter field in a second portion of said graphical user interface adjustable to assist in identifying the optimal solution to the complex problem represented using the genetic algorithm, said evolution parameter field having a first value, said evolution parameter field comprising at least one variable related to the evolution of said genetic algorithm towards the optimal solution; and

modification interface for modifying the evolution of said solution for said genetic algorithm in real time based upon an adjustment of said evolution parameter field from said first value to a second value.

2. (Previously Presented) The graphical user interface according to claim 1, wherein the modification interface used for the adjustment of said evolution parameter field is a slider.

3. (Previously Presented) The graphical user interface according to claim 1, wherein said modification interface to said evolution parameter field is manipulated by a mouse, joystick, knob, or touchpad.

4. (Previously Presented) The graphical user interface according to claim 1, wherein said variable related to the evolution of said genetic algorithm is a number of evaluations performed in said genetic algorithm during a run.

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5. (Previously Presented) The graphical user interface according to claim 1, wherein said variable related to the evolution of said genetic algorithm is a probability of any bit in a chromosome representing a potential solution of being a cutpoint.

6. (Previously Presented) The graphical user interface according to claim 1, wherein said variable related to the evolution of said genetic algorithm is a probability of any bit in a chromosome representing a potential solution of being mutated during a run of said genetic algorithm.

7. (Previously Presented) The graphical user interface according to claim 1, wherein said modification interface comprises a direct manipulation of said genetic algorithm as indicated by the adjustment of said evolution parameter field, said direct manipulation being accomplished by overwriting the at least one variable related to the evolution of said genetic algorithm.

8. (Currently amended) A computer implemented method for dynamically modifying an evolution of a solution for a genetic algorithm that represents potential solutions to complex problems as one or more chromosomes and selects a solution from the potential solutions based on the chromosome that optimally solves the complex problem according to a fitness function, said method comprising:

adjusting an evolution parameter field within a graphical user interface of a computer system from a first value to a second value[[,]] resulting in an adjustment, said evolution parameter field comprising at least one variable related to the evolution of said genetic algorithm;

updating the evolution of said solution for said genetic algorithm in real time based upon said adjusting; and

displaying the update of said solution for said genetic algorithm within the graphical user interface.

9. (Previously Presented) The method according to claim 8, wherein in said adjusting, said evolution parameter field is adjusted from said first value to said second value by a user.

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10. (Previously Presented) The method according to claim 8, wherein said updating further comprises a direct manipulation of said genetic algorithm as indicated by the adjustment of said evolution parameter field, said direct manipulation being accomplished by overwriting a variable used in said genetic algorithm.

11. (Previously Presented) The method according to claim 10, wherein said variable used in said genetic algorithm is a number of evaluations performed each run in said genetic algorithm.

12. (Previously Presented) The method according to claim 10, wherein said variable used in said genetic algorithm is a probability of any bit in a chromosome representing a potential solution of being a cutpoint.

13. (Previously Presented) The method according to claim 10, wherein said variable used in said genetic algorithm is a probability of any bit in a chromosome representing a potential solution of being mutated during a run of said genetic algorithm.

14. (Previously Presented) A machine readable memory for storing computer code to act as a graphical user interface to a genetic algorithm that represents potential solutions to complex problems as one or more chromosomes and selects a solution from the potential solutions based on the chromosome that optimally solves the complex problem according to a fitness function, said memory comprising:

a first code section stored in memory for receiving an adjustment of an evolution parameter field within said graphical user interface from a first value to a second value, resulting in an adjustment, said evolution parameter field comprising at least one variable related to the evolution of said genetic algorithm towards the optimal solution;

a second code section stored in memory for a modification interface that modifies the evolution of said solution for said genetic algorithm in real time based upon an adjustment of said evolution parameter field from a first value to a second value; and

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a third code section stored in memory for displaying the modification of the evolution of said solution for said genetic algorithm within the graphical user interface.

15. (Original) The machine readable memory according to claim 14, wherein said memory exists on a server.

16. (Previously Presented) The machine readable memory according to claim 14, wherein said memory is used on a server providing a website on the Internet.